



PORTSMOUTH FIRE DEPARTMENT

FIRE PREVENTION DIVISION

Portsmouth Fire Department Rules and Regulations for Fire Protection Systems and Permits

The Fire Department shall be notified of any planned or emergency fire protection system impairment via the fire alarm dispatcher at 603.436.5000.

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ALL INSPECTIONS AND PERMITS ARE APPLIED FOR ONLINE AT THE CITY'S [OPENGOV](#) PLATFORM

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1. Knox Boxes

- a. Knox Boxes are required for all buildings other than 1 and 2 family dwellings. Contact the Fire Department regarding the number of boxes, master key quantity/requirements and installation locations prior to ordering at www.knoxbox.com (NFPA 1: 18.2.2.1, 2024 Edition)

2. Fixed Fire Suppression and Extinguishing Systems

(NFPA 13, 13R, 13D, 14, 17, 17A, 20, 2001)

A. Permits and inspections shall be required for

- 1) New installation of any fixed fire suppression or extinguishing system including sprinkler, standpipe, kitchen, dry chemical and clean agent system
- 2) Modifications of existing systems. Relocating a head, nozzle etc. is a modification
- 3) No permit is required for testing, inspecting and replacement of damaged or faulty items

B. Electronic plans are required for all systems

- 1) Permitting is paperless through the city's opengov platform. No work shall commence without an approved permit available on the job site (NFPA 1: 1.7.12.9, 1.13.2 and 1.13.6.9, 2024 Edition)
- 2) Plans shall include all applicable items listed in NFPA 13: 28.1, 2022 Edition; NFPA 13R: Ch. 8 2022 Edition; NFPA 13D: 4.4, 2022 Edition; NFPA 17: Ch. 10, 2024 Edition; NFPA 17A: Ch. 7, 2024 Edition; NFPA 20: 4.2.3.2, 2022 Edition.; or NFPA 2001: 6.1.2, 2022 Edition.
- 3) A signed owner's certificate, waterflow test data less than 12 months old, complete floor plans, and detailed hydraulic calculations are required with all plans
- 4) A NICET Level III/IV Water-Based Systems Layout Technician (Special Hazards, if applicable) or a New Hampshire licensed Fire Protection Engineer knowledgeable in applicable design criteria, state and local regulations shall prepare plans, unless waived in advance. This does not apply to NFPA 13D system plans (NFPA 1: 1.15.6, and 1.16.3, 2024 Edition)

C. Installation, Inspection, and Acceptance Requirements

- 1) A rough inspection of all system components shall be scheduled and completed prior to being covered (NFPA 1: 1.7.13 2024 Edition)



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- 2) The hydraulic data nameplate, general information sign and a list of all control, drain, venting and test connections shall be provided with a permanently marked weatherproof metal or rigid plastic sign, secured with corrosion-resistant wire, chain etc. No stickers (NFPA 13: 29.5.1 and 29.6.1, 2022 Edition)
- 3) All floor control waterflow alarms should alarm between 15-30 seconds and main waterflow alarms should alarm within 30-45 seconds
- 4) The contractor shall submit a Contractor's Material and Test Certificate for Aboveground Piping prior to requesting a final inspection. Final inspection shall not be scheduled without this form

3. Fire Department Connections

- A. Depending on building location it will be a 5" Storz with a 30-degree turn down or 2- 2 1/2" with National Standard threads. Check with the Fire Department prior to selecting (NFPA 13: 16.12.3.3, 2022 Edition)

4. Standpipes

- A. Standpipes shall be equipped with 2 1/2" to 1 1/2" reducers. The 2 1/2" component shall be provided with National Standard threads and the 1 1/2" component shall be equipped with Iron Pipe thread (NFPA 14 7.9.4.1, 2024 Edition)

5. Fire Pumps

- A. The installation, modification, removal from service or replacement of, any fire pumps, jockey pumps, controllers, and generators, require a fixed fire suppression system permit (NFPA 1: 1.13.8, 2024 Edition)

6. Sprinkler Backflow Preventers

- A. A licensed plumber is required to obtain a plumbing permit to install a new sprinkler backflow preventer. Certification is required to test, repair or replace sprinkler backflow preventers. For questions about backflow permitting please contact the plumbing/mechanical inspectors at 603.610.7340 (NH RSA 485:11, Portsmouth Water Department)

7. Fire Alarm Systems

- A. Permits and Inspections shall be required for
 - 1) New installations
 - 2) Alterations of existing systems (e.g. relocating a device or panel replacement).
 - 3) No permit is required for testing, inspecting, replacing damaged, faulty devices and batteries



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B. Electronic plans are required for all fire alarm systems

- 1) All permitting is paperless through the city's [opengov](https://opengov.portsmouthnh.gov/) platform. No work shall commence without the approved permit available on the job site (NFPA 1: 1.7.12.9, 1.13.2 and 1.13.6.9, 2024 Edition)
- 2) Submittals shall include all applicable items listed in NFPA 72: 7.2.1, 2022 Edition unless waived in writing

C. Submittals, Installation and Acceptance Requirements for fire alarms

- 1) A NICET Level III/IV Fire Alarm Systems Technician or a New Hampshire licensed Fire Protection Engineer knowledgeable in applicable design criteria, state and local regulations shall prepare plans, unless waived in advance (NFPA 1: 1.15.6 and 1.16.3, 2024 Edition)
- 2) Battery and voltage drop calculations, riser diagram, input/output matrix or narrative are required with plan submittals
- 3) Rough and final inspections are required, unless waived in writing (NFPA 1: 1.7.13 2024 Edition)
- 4) All FACP, annunciator and pull station locks shall be keyed CAT-30
- 5) Duct smoke detectors should be fire alarm initiating devices in I, E and H occupancy types and supervisory alarm initiating devices in A, B, F, R and S occupancy types
- 6) All fire and carbon monoxide signals shall be transmitted to a UL-listed station via individual point with description and immediately retransmitted to the Portsmouth Fire Department (NFPA 72: 26.2.3, 2022 Edition)
- 7) All required annunciators shall be located as directed. Consult with Fire Department for approval of location of annunciators (NFPA 72: 10.18.3, 2022 Edition)
- 8) A red outside strobe programmed to operate upon any fire alarm activation along with a green outside strobe to operate upon carbon monoxide device activation and shall be considered a supplementary visual signal under NFPA 72: 18.7, 2022 Edition. These signal devices shall be located on the address side of the building in locations approved by the Fire Department. These strobes shall not be deactivated upon a silence in the fire alarm system
- 9) An audible alarm (bell preferred) above the fire department connection is required to sound on any waterflow condition. A bell may be system powered or line voltage (NFPA 13: 7.7, 2022 Edition)
- 10) A completed NFPA 72, 2022 Edition Fire Alarm System Record of Completion Form (including testing and supplemental forms) shall be provided. Final inspections shall not be scheduled without these documents
- 11) Contact the Fire Department regarding garage gas detection systems prior to installation



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8. Emergency Responder Communication Enhancement Systems ('BDA')

- A. In all new and existing buildings, an approved emergency communication enhancement system shall be installed where the minimum radio signal strength in the building cannot be maintained. Unless requirement is waived. Systems shall be designed, installed, and maintained in accordance with NFPA 1225, 2022 Edition. (NFPA 1: 10.11.2-3, 2024 Edition)

9. Hot Work

- B. A permit and a fire watch is required for all hot work outside of 1 and 2 family dwellings. Some hot work fire watches may be performed by a contractor. Hot work in an occupied building requires a paid Fire Department fire watch. Fire Department fire watches are billed at cost. A 4-hour minimum applies. Call for pricing. (NFPA 1: 1.7.17.1, 2024 Edition)

10. High Pile Combustible Storage

- A. High piled storage is defined as: 'Solid-piled, palletized, rack storage, bin box, and shelf storage in excess of 12 feet in height'
- B. An annual permit is required to use any building or portion thereof as a high-piled storage area exceeding 500 square feet. An annual inspection and an approved engineered sprinkler design, if applicable, are required to maintain a valid permit *(NFPA 1: 1.7.7.1 and 1.13.8, 2024 Edition)*

11. Aircraft Fuel Servicing

- A. An annual permit is required to provide aircraft fuel servicing. Inspections may be carried out by the Pease Development Authority and/or the Fire Department. This permit is in addition to any FAA requirements. (NFPA 1: 1.7.7.1 and 1.13.8, 2024 Edition)

12. Aircraft Hangar Operations

- A. An annual permit and inspection are required to operate an aircraft hangar for servicing or repairing aircraft. (NFPA 1: 1.7.7.1 and 1.13.8, 2024 Edition)

13. Hotel, Lodging, and Rooming House Life Safety Inspections

- A. An annual inspection is required for all hotels, lodging and rooming houses. (NFPA 1: 1.7.7.1 and 1.13.8, 2024 Edition)

14. NH Department of Health and Human Services Mandated Inspections

- A. The Fire Department performs state-mandated inspections for Foster Care, Adoptions, Home Daycare, Educational and Daycare Facilities. (NFPA 1: 1.7.7.1 and 1.13.8, 2024 Edition)



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15. Tents

- A. A Fire Department inspection is required for tents 400 square feet or larger or when a tent is used for a place of assembly of 50 persons or more. This includes temporary single day use. No assembly permit or Fire Department Inspection is required for tents on the land of a 1 or 2 family dwelling. (NH RSA 155:18 and 155:34 and 1.13.8, 2024 Edition)
- B. A building permit and an inspection is required for tents 400 square feet or larger, regardless of use or installation location, from the Inspections Department (NH State Building Code)

16. Places of Assembly

- A. A place of assembly permit is required where there are 100 or more occupants. All places of assembly require two inspections, annually. (NH RSA 155:18 and 155:34)
- B. An occupant load of less than 100 still requires a certificate of inspection when serving alcohol for the NH State Liquor Commission from the Fire Department and similarly follows the Fire Department's place of assembly permit process (NFPA 1: 1.13.8, 2024 Edition)

17. Explosives

- A. The Fire Department shall be notified of the location of all safe havens for vehicles transporting explosives, in writing with signed receipt (NFPA 498: 4.6 2023 Edition)
- B. The location of explosives stored in magazines require Fire Department notification verbally before the end of the day on which the explosive material storage commenced and in writing within 48 hours from the time such storage commenced (NFPA 495: 4.1.2 2023 Edition)

18. Fireworks

- C. Use of fireworks is prohibited unless permitted by the City Council or City Manager. Portsmouth City Ordinances Section 8.117 and NFPA 1: 10.10.2 2024 Edition